

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-15 are presently active in this case. The present Amendment adds new Claims 9-15, without introducing any new matter.

The outstanding Office Action objected to the drawings and specification as failing to comply with 37 C.F.R. 1.84(p)(5). Claims 1-3 and 7 were rejected under 35 U.S.C. §103(c) as unpatentable over Fujita et al. (U.S. Patent No. 6,542,705, herein "Fujita '705") in view of Inuyama et al. (Japanese Patent No. 63-210979, herein "Inuyama"). Claims 1-3 and 7 were rejected under 35 U.S.C. §103(a) as unpatentable over Fujita et al. (U.S. Patent Publication No. 2002/0043523 herein "Fujita '523") in view of Inuyama. Claims 4-6 and 8 were rejected under 35 U.S.C. §102(b) as anticipated by Fujita '523.

To vary the scope of protection recited in the claims, new Claims 9-15 are added. New Claim 9 depends upon Claim 1 and recites "said capacitor has a capacitance of more than 80F."¹ New Claim 10 depends upon Claim 1 and recites "said capacitor has a capacitance of more than 2000F."² New Claim 11 depends upon Claim 1 and recites "said capacitor is an electric double layer capacitor."³ New Claim 12 depends upon Claim 1 and recites features regarding a power supply unit and a switch.⁴ New Claim 13 depends upon Claim 12 and recites features regarding a charger.⁵ New Claim 14 depends upon Claim 1 and recites that "said abnormality of the image forming apparatus is a paper jam."⁶ New Claim 15 depends upon Claim 4 and recites features regarding a voltage sensor.⁷ Since the new

¹ See for example Applicants' Specification at page 19, lines 3-5.

² See for example Applicants' Specification at page 19, lines 6-9.

³ See for example Applicants' Specification at page 20, lines 15-21.

⁴ See for example Applicants' Specification at page 21, lines 15-17.

⁵ See for example Applicants' Specification at page 21, lines 15-20.

⁶ See for example Applicants' Specification at page 25, lines 11-22.

⁷ See for example Applicants' Specification from page 25, line 3 to page 26, line 10.

claims find non-limiting support in the disclosure as originally filed, the changes are not believed to raise a question of new matter.⁸

In response to the objection to Figure 1, Applicants respectfully traverse the objection. Applicants' original Specification clearly states "paper feed cassettes 15 through 18" on page 13, lines 24-25. However, in order to clarify the reference characters in the Specification, the Specification is amended to recite "paper feed cassettes 15, 16, 17 and 18." Accordingly, the reference characters 16 and 17 can be found in the Specification as originally filed and consequently Applicants request reconsideration of the objection under 37 C.F.R. 1.84(p)(5).

In response to the rejection of Claims 1-3 and 7 under 35 U.S.C. §103(c) as unpatentable over Fujita '705 in view of Inuyama, Applicants respectfully traverse the rejection and request reconsideration of this rejection. Applicants respectfully submit that at the time the invention was made, the present invention and the invention of Fujita '705 were obligated to be commonly owned by the same Assignee. The Assignee for both cases is Ricoh company, Ltd., Tokyo. Further, the present Application and Fujita '705 have a common inventor: Kazuhito Kishi, Kanagawa, Japan. Therefore, Applicants respectfully request that the reference Fujita '705 be withdrawn from consideration and the rejection of Claims 1-3 and 7 under 35 U.S.C. §103(c) be withdrawn.

In response to the rejection of Claims 1-3 and 7 under 35 U.S.C. §103(a) as unpatentable over Fujita '523 in view of Inuyama, Applicants respectfully traverse the rejection and request reconsideration of this rejection. Applicants respectfully submit that Fujita '523 does not teach or suggest Applicants' claimed controller performing a control such that the capacitor is charged in accordance with a remaining amount of stored energy thereof. However, the outstanding Office Action teaches that Fujita '523 teaches such a

⁸ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

feature at page 8, paragraph 113.⁹ Applicants respectfully disagree. This text portion in Fujita '523 merely describes the discharging operation of a capacitor and does not describe the configuration of charging a capacitor in accordance with a remaining amount of energy stored in the capacitor.

Applicants respectfully traverse the obviousness-type rejection based on Fujita '523 and Inuyama because there is insufficient evidence to motivate the modification of the Fujita '523's heating device for an image forming apparatus by incorporating Inuyama's monitoring means to enhance safety of a fixing device, for the following reasons.¹⁰

Inuyama's invention is concerned with increasing the safety of a recording apparatus, and is therefore different in the object of Fujita '523 to provide a heating device capable of saving power and obviating noise caused by a rush current and sharp change in current when a big amount of energy is supplied.¹¹ Accordingly it is believed that there is no suggestion or motivation to combine Fujita '523 with Inuyama, because the charging of a capacitor to provide energy for a heater, as taught by Fujita '523 cannot be combined without substantial change to the charging of a capacitor C211 of Inuyama configured to store the failure state and to store the time of the failure.

Furthermore, it is not clear from the record how Inuyama charging of a capacitor used for information storage when a door is open could be incorporated into the Fujita '523's power capacitor. Such modification would require a substantial reconstruction or redesign of the elements of Fujita '523, and/or would change the basic principle of operation of Fujita

⁹ See outstanding Office Action on page 4, lines 13-15.

¹⁰ See MPEP 2143.01 stating "[o]bviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art," (citations omitted). See also MPEP 2144.08 III stating that "[e]xplicit findings on motivation or suggestion to select the claimed invention should also be articulated in order to support a 35 U.S.C. 103 ground of rejection. . . . Conclusory statements of similarity or motivation, without any articulated rational or evidentiary support, do not constitute sufficient factual findings."

¹¹ See Fujita '523 at page 2, paragraph 19, lines 1-6.

'523. There is no evidence that a person of ordinary skill in the art would be motivated to perform such changes and redesign.¹²

In rejecting a claim under 35 U.S.C. § 103(a), the USPTO must support its rejection by "substantial evidence" within the record,¹³ and by "clear and particular" evidence¹⁴ of a suggestion, teaching, or motivation to combine the teachings of different references. As discussed above, there is no substantial evidence, nor clear and particular evidence, within the record of motivation for modifying Fujita '523 by incorporating Inuyama's capacitor to store information on the state of the failure and the failure time. Without such motivation and absent improper hindsight reconstruction,¹⁵ a person of ordinary skill in the art would not be motivated to perform the proposed modification, and Claims 1-3 and 7 are believed to be non-obvious and patentable over the applied prior art.

In response to the rejection of Claims 4-6 and 8 under 35 U.S.C. §102(b), Applicants respectfully traverse the rejection and request reconsideration of the rejection, as discussed next.

Briefly recapitulating, Claim 4 relates to an image forming apparatus including a fixing unit, a heater, and a power storage unit including a capacitor to supply energy to the heater. If the image forming operation is stopped, a controller controls the charging of a capacitor *in accordance with the remaining amount of energy stored therein*. The invention

¹² See In re Ratti, 270 F.2d 810, 813, 123 USPQ 349, 352 (reversing an obviousness rejection where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.")

¹³ In re Gartside, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000) (holding that, consistent with the Administrative Procedure Act at 5 USC 706(e), the CAFC reviews the Board's decisions based on factfindings, such as 35 U.S.C. § 103(a) rejections, using the 'substantial evidence' standard because these decisions are confined to the factual record compiled by the Board.)

¹⁴ In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, although 'the suggestion more often comes from the teachings of the pertinent references.' The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular." (emphasis added).

¹⁵ See MPEP 2141, stating, as one of the tenets of patent law applying to 35 USC 103, that "[t]he references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention."

according to Claim 4 makes it possible to rapidly recharge the capacitor for the image forming operation.

Turning now to the applied reference, the Fujita '523 publication discloses a heating device for an image forming apparatus. The heater in Fujita '523 has an auxiliary heating element with an auxiliary power source. A capacitor in the auxiliary power source is charged when power is supplied by the mains power source.¹⁶ However, Fujita '523 fails to teach charging of a capacitor *in accordance with the remaining amount of energy stored therein*. Fujita '523 teaches that the capacitor 17 *runs out of charge* after the warm-up of the fixing device and therefore the supply of power from the capacitor 17 to the heating element ends.¹⁷ Therefore, the capacitor is recharged from a state in which the capacitor contains no more energy. Accordingly, charging a capacitor after it ran out of charge, as taught by Fujita '523, does not meet the Claim 4 feature of charging a capacitor in accordance with the remaining amount of energy stored therein.

Therefore, the prior art fails to teach or suggest every feature recited in Applicants' claims, so that Claims 4-6 and 8 are patentably distinct over the prior art. Accordingly, Applicants respectfully traverse, and request reconsideration of, the rejection based on Fujita '523.¹⁸

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-15 is earnestly solicited.

¹⁶ See Fujita '523 in the Abstract.

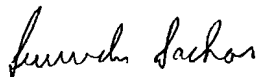
¹⁷ See Fujita '523 at page 6, paragraph 99, lines 4-9.

¹⁸ See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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